

REMARKS/ARGUMENTS

Reconsideration of this application is requested. This responds to the issues raised in the Official Action of November 24, 2009, a Final Rejection, and accompanies a Request for Continued Examination.

Claims 1-6, 11, 12, 17, 19-23 and 25 are pending in the application of which claims 19-22 are withdrawn from consideration as directed to non-elected subject matter.

In item 5 of the Action, Claim 1 has been rejected on the basis of 35 USC §112 on the ground that it recites the limitation “polyether modified polydimethylsiloxane”. The Examiner states that there is insufficient antecedent basis for this limitation because Claim 25 from which Claim 1 depends, only recites an acrylate modified polydimethylsiloxane. The Examiner is correct. Claim 1 has been amended by the deletion of the words “or a polyether modified polydimethylsiloxane”.

Claims 1 to 6, 11 to 12, 17 and 25 stand rejected under 35 USC §103 as being unpatentable over Johnson et al (W099/29787) in view of Yamaguchi et al (WO 01/21717) (referring to US 2003/0040551, an English language equivalent) and Wacker Silicones Corp., Booth 1105, Metal Finishing Vol. 99, Issue 10, October 2001, page 50 with evidence provided by Turgis et al (US 2004/0157959).

Regarding Claim 25 the Examiner alleges that Johnson teaches a non-aqueous UV-curable ink composition for ink-jet printing comprising a pigment (page 21, middle paragraph) such as carbon black (page 5, third paragraph), a dispersant (page 21, middle paragraph) such as Solperse 2400 (page 25, Table 1) which is a low molecular weight hyperdispersant, a dispersant synergist (page 21, middle paragraph) such as Solperse 5000 (page 25, Table 1), a photo initiator (page 21, middle paragraph) and a diluent. Johnson teaches in the Examiner's view that the diluent is composed of mono-dye-tri-or higher functional material (page 8, last paragraph). The Examiner admits that Johnson fails to teach the exact mixture of the reactive diluent and the surfactant required by Claim 1.

To fill this gap, the Examiner alleges that Yamaguchi discloses a UV-curable printing vehicle which uses prelimarizable media such as SR-9003, DPHA, DPGDA, SR-499 and SR-454.

The Examiner's contention is that it would have been obvious to a person of ordinary skill

in the art to use the components as taught by Yamaguchi as a mixture of reactive diluents of Johnson and that one would have been motivated to do so in order to receive the expected benefit of increasing the film forming capability of the composition.

This leg of the Examiner's argument is flawed. The named ingredients are not disclosed in Yamaguchi as a combination to be used. They are merely disclosed as examples of suitable materials to include individually in a composition.

Thus while Claim 25 requires in combination neopentyl glycoldiacrylate (i.e. SR-9003), DPHA, DPGDA, SR-499 and SR-454, Yamaguchi discloses no composition containing such a combination of materials.

The materials in question are examples of compound (C) called for in Claim 1 of Yamaguchi. Claim 1 of Yamaguchi requires "a compound" of this kind rather calling for a mixture of such compounds. The named compounds appear in Sections 0067 to 0072 of the US version of Yamaguchi along with a host of other compounds. There is no specific teaching of any combination of compounds which individually fall within Type (C) in Yamaguchi and more especially there is no specific teaching to combine the particular ones required by Claim 25. Applicants suggest there would be a vast number of ways in which to pick a combination of four different materials satisfying the requirements for compound (C) out of the extensive lists provided in Yamaguchi. The chances of a skilled person hitting upon the particular combination required by Claim 25 by happenstance are minimal. A claim which is directed to a combination of prior art elements "is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR v Teleflex*, 82 USPQ2d 1385, 1396 (2007). For at least these reasons the subject matter of Claim 25 cannot be *prima facie* obvious over the cited art.

The benefits of the specific choice of the mixture of ingredients are demonstrated in the applicant's specification.

The Examiner has commented in relation to the data in Table 2 in the applicant's specification arguing that the data do not demonstrate an unexpected result. The Examiner has commented that the applicant has provided data only where the surfactant concentration is 0.3 wt%. However, Applicants note that the Examiner has maintained the objection in question even in connection with Claim 6 which specifies that the surfactant concentration is about 0.3 wt% so

that this basis of objection cannot properly apply at least in connection with Claim 6. Neither has the Examiner advanced any reasoning as to why the range in Claim 5 of 0.01 to about 2 wt% should not also be accepted as plausibly reflecting the same benefits as are shown in the example. Furthermore, Claim 1 specifies a test result dependent upon the surfactant thus guaranteeing the required surprising effect.

The Examiner has commented that ink formulation D also exhibits the desired nozzle loss and hole to area ratio even though the surfactant is outside the scope of Claim 23. This is not a logical basis for objecting to the inventiveness of the claimed formulations. Formulation D was within the scope of the application as originally filed. The fact that it has been excluded from the scope of the current claims by amendment does not logically imply that the practical result obtained is not surprising. The discovery of a further class of ink compositions offering superior performance compared to the prior art should be considered to be inventive irrespective of the status of formulation D. It has also been remarked that formulation C meets the limitations of Claim 23 does not meet the limitations of dependent Claim 4. Again, Applicants submit that this is not relevant to the issue. Formulation C is not the best of the formulations according to the claims but it still provides a good result and surprising benefit.

For the above reasons it is respectfully submitted that all pending claims define patentable subject matter. Reconsideration and allowance are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

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